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Facility-Wide Communication System

ABSTRACT OF THE INVENTION

A method and system for communication within an
5 energy-transmission-limited environment. RF transceivers
throughout the site are located site-wide such that areas
within the site in which communications are desired are
within range of at least one of the RF transceivers. At
each location RF transceivers are connected to a control
10 unit. The control unit provides power to the transceivers
and allows bi-directional communication of audio/voice
and/or digital information. The control units may be
networked to each other using standard network type
category-5 or equivalent cables and may communicate to one
15 another via the network connection. The control units may
also be networked via an alternating current powerline by
using an alternating current modem. The transceiver of the
present invention utilizes single sideband modulators to
modulate voice and/or digital signals. The signals are
20 demodulated and filtered at a receiving end of the
transceiver. A comb filter attenuates noisy signals with
drifting harmonics.